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Computational Methods for Control of Infinite-dimensional Systems

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There are many challenges and research opportunities associated with developing and deploying computational methodologies for problems of control for systems modeled by partial differential equations and delay equations. The state of these systems lies in an infinite-dimensional space, but finite-dimensional approximations must be used. Fundamental issues in applied and computational mathematics are essential to the development of practical computational algorithms. The focus of this workshop will be on applications, physics-based modeling, numerical methods, sensor/actuator location and optimal control. Although computation and optimization are the key themes that tie the areas together, topics in infinite-dimensional systems theory will be discussed since these are the foundation for all the topics.

SPEAKERS
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Fariba Fahroo, DARPA
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Michael Hintermüller, Humboldt-Universität
Michael Hinze, Universität Hamburg
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Barbara Kaltenbacher, Universität Klagenfurt
Irena Lasiecka, University of Memphis
Suzanne Lenhart, University of Tennessee
Alessandro Macchelli, Universita Di Bologna
Kirsten Morris, University of Waterloo
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Carlos Rautenberg, Humboldt-Universität
Jean-Pierre Raymond, Université de Toulouse III (Paul Sabatier)
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